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Consultant Report:

FOURTH ANNUAL MEASUREMENT AND EVALUATION REPORT
HEALTH REFORM INITIATIVE (HRI)
Department of Executive Services
Human Resources Division
King County
August 2009

Respectfully submitted by Ron Z. Goetzel, Ph.D.

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Summary of Major Findings

- The 4th Annual Measurement and Evaluation Report is a well-written, clear, analytically sound, and thorough report of the current status of King County's Health Reform Initiative (HRI).
- In full disclosure, Dr. Goetzel and colleagues are limited in their ability to completely validate the analyses without directly accessing and analyzing the raw health risk and medical claims data used in the Measurement and Evaluation Report.
- King County staff members have used sound and defensible statistical methods to analyze the HRI's progress in reaching its health and financial goals.
- King County's conclusions and findings are reasonable in light of the reported health and financial data.

Background:

King County's Health Reform Initiative (HRI) engaged Dr. Ron Z. Goetzel, Ph.D., at Thomson Reuters to review its 4th Annual Measurement and Evaluation Report, to certify that the analyses contained therein are valid, and to suggest improvements in future analyses.

Overall report:

The 4th Annual Measurement and Evaluation Report is a well-written, clear, analytically sound, and thorough analysis of the current status of King County's Health Reform Initiative. The report is focused in King County's efforts to reduce the demand for (or use of) health care services and moderate the fees charged by the health care system for medical services. Dr. Goetzel's review is primarily focused on King County's efforts at improving employees' and spouses/domestic partners' health, reduce medical care costs, and improve workers' productivity (reduce absenteeism and presenteeism).



Certification limitations:

In full disclosure, Thomson Reuters is limited in its ability to completely validate the analyses reported in the 4th Annual Measurement and Evaluation Report for several reasons:

- Thomson Reuters has reviewed the reports produced by King County but has not worked directly with the underlying data. As a result, we are not able to independently analyze the data and have not been asked to reproduce the results.
- Thomson Reuters was not involved with processing and cleaning of the data.
- The non-experimental nature of the HRI hinders any attribution of causation. For obvious and practical reasons, King County employees were not randomized into intervention and control groups nor were participants in the HRI compared to non-participants in other organizations. In fact, nearly all King County employees have participated in the HRI throughout the study period. Therefore, by necessity, the design of the evaluation studies is pre-experimental in nature (pre/post design) without a control or comparison group. Thus, we cannot fully rule out the effects of self-selection bias, history, and maturation as threats to internal validity.

Sound methods:

King County staff used sound and defensible statistical methods to analyze the impact of the HRI in achieving its health and financial goals. Comparing healthcare cost and utilization trends over time to baseline trends is a valid way of evaluating the effectiveness of the HRI program, given "real-world" constraints

Findings are consistent with reported data:

We agree with King County's conclusions and findings in light of the reported data. The changes in King County employees' self-reported health risk are positive and impressive. It is also impressive that the "percent missing" values (especially for biometrics) remain consistent over time which bolsters the reliability and validity of the data.

The changes in the burden of risk for conditions affected by behavior are largely consistent with results from the health risk analysis. Close attention should be paid, however, for medical services related to high biometric values (high cholesterol, blood sugar and blood pressure), obesity, and mental health as these costs are increasing over time.



Overall health care spending is within target. Much of the attenuation in trend is attributable to lower spending for prescription drugs, although, paradoxically the number of prescriptions per member per year has consistently increased over time. Concern is noted about the rise on costs for dependent adults who may not be adequately exposed to worksite-based interventions available to employees.

As noted in the report, employee absenteeism and presenteeism have remained stable over the course of the study period. When absenteeism is assessed using a 12 month framework, rather than for the prior four weeks, the rate of absenteeism increased significantly in 2009 when compared to a relatively even rate during the preceding three years. This may warrant further investigation to determine whether this self-reported absenteeism finding is consistent with administrative records.

Recommendations

In a previous review of a draft report, Ron Goetzel offered several recommendations for improving the methods used in the analysis. King County appropriately and adequately responded to the comments and recommendations offered. Below, we list some additional minor recommendations or suggestions regarding the analysis:

- In the main report, show N's (numbers of people) responding to survey questions within or next to the figures (e.g., for Figures 27 and 28).
- In the Technical Appendix, the scale used for figures should consistently be anchored at "0". Some are (e.g., Figures 11, 12) but others are not (e.g., Figure 13 and 15).
- Figure 6 in the Technical Appendix should include a key that describes the lines and symbols in the chart. The narrative below the figure defines the symbols but it is always helpful to include this information in the chart itself so that it can be displayed independently of the narrative.
- In conclusion, we recommend King County accept the analyses and conclusions of the 4th Annual Measurement and Evaluation Report.